

Attachment 4

U.S. Fish and Wildlife Service letter to U.S. Army Corps of Engineers on potential endangered species impacts from Minnesota Steel project, 8/23/07



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Twin Cities Field Office
4101 American Blvd E.
Bloomington, Minnesota 55425-1665

AUG 23 2007

Mr. Robert J. Whiting, Chief
Regulatory Branch
Saint Paul District,
U.S. Army Corps of Engineers
190 Fifth Street East, Suite 401
St. Paul, Minnesota 55101-1638

Dear Mr. Whiting:

This responds to your August 6, 2007, letter regarding the Minnesota Steel Project and consultation with the U.S. Fish and Wildlife Service (Service) under section 7 of the Endangered Species Act of 1973, as amended. The U.S. Army Corps of Engineers (Corps) has made the determination that the proposed action may affect, but is not likely to adversely affect the Canada lynx (*Lynx canadensis*), a federally-listed threatened species. We have reviewed the information provided with your letter and related information and concur with your determination.

The Corps is reviewing a Clean Water Act Section 404 permit application from Minnesota Steel Industries, LLC (MN Steel) to discharge fill material into wetlands to facilitate the construction and operation of an open pit taconite mine at the former Butler Taconite Company site and to construct and operate new facilities: a crusher; a concentrator; a taconite pellet plant; a plant for producing direct reduction iron (DRI); and a steel mill consisting of two electric arc furnaces, two ladle furnaces, two thin slab casters, and a sheet rolling mill. The former Butler Taconite Stage 1 tailings basin would be reactivated for the disposal of concentrator tailings.

The mine component of the MN Steel project would be located in Sections 2, 10, and 11, in T. 56 N., R. 23 W. The processing plant would be located in Sections 35 and 36, in T. 57 N., R. 23 W. The tailings basin would be located in Sections 4, 5, 7, 8, 17, 20, in T. 56 N., R. 22 W. The entire project would be located near the City of Nashwauk, in Itasca County, Minnesota. (See Figures 1 and 2 depicting the location and dimension of the action area.)

Under section 7 of the Endangered Species Act of 1973, the Corps began conducting informal consultation with the Service in 2004 regarding federally-listed threatened species that may utilize habitat on or near the MN Steel action area. Two federally-listed species in the action area have recently been delisted. They are the gray wolf (*Canis lupus*) and the bald eagle (*Haliaeetus leucocephalus*). Consultation is not required for delisted species. There remains one federally-listed species that may be present in the

action area, the Canada lynx. Further, there are no species proposed for listing, and there is no listed critical habitat in the action area.

Enclosed with the Corps' August 6 letter was the Biological Assessment (BA) prepared by the Corps for the Canada lynx. The BA is required as a part of the informal consultation process to determine the project impacts on the listed species. The BA was prepared based upon the MN Steel Draft and Final Environmental Impact Statements, and the 2007 Canada Lynx Assessment Final Report (ENSR 2007). The 2007 Lynx Report was prepared by the ENSR Corporation, a consultant for MN Steel, and a copy was provided to this office directly from ENSR in April 2007. The BA contains a description of the proposed project, a description of the action area (affected environment), and the anticipated consequences to the Canada lynx with the conduct of the proposed action.

Northeastern Minnesota is at the southern edge of the lynx range in North America, and the action area is located near the southeastern edge of the lynx range (historical and present day) in Minnesota (Fig. 2). Male and female Canada lynx home ranges in Minnesota are approximately 34 and 8 square miles, respectively (Moen et al. 2006). The common causes of lynx mortality are starvation, inter-specific strife, hunting, trapping (including snaring), and vehicle collisions.

Long distance movements are characteristic of lynx (Mowat 2000). These movements may consist of a series of relatively short distance movements between patches of high snowshoe hare (*Lepus americanus*) abundance (Ward and Krebs 1985) or, if prey are not abundant, a search for such patches of more suitable habitat. Long distance movement may lessen in areas with good prey densities. Sub-adult lynx are also known to range widely even when prey are abundant (Quinn and Thompson 1987), presumably as an innate attempt to establish home ranges away from their natal areas. Lynx also make exploratory movements outside their home ranges (Squires et al. 2001) and are capable of moving extremely long distances (Mech 1977, Poole 1997, Squires et al. 2001). These movements may be necessary for lynx to persist in landscapes where potential habitat is not homogeneously distributed (Hoving et al. 2004).

Little was known about the present status of lynx in the vicinity of the action area. Therefore, the Service requested that the action area be surveyed for lynx occurrence. The Corps and MN Steel complied with this request and contracted with ENSR Corporation to design, implement, and report the findings of the survey. The Service and the Corps determined that the survey would encompass the action area and a buffer area extending at least six miles from the outer boundary of the action area – the approximate radius of a typical male lynx home range in Minnesota (Moen et al. 2006). The resulting polygon was further modified by expanding the six mile buffer to coincide with the nearest township boundaries. This resulted in a survey area of 252 square miles – seven townships (Fig. 1). Less than 8 square miles of the survey area would be directly impacted by the proposed action and more than half of that area is already disturbed by previous mining activities and other human developments.

During the winter of 2006, the contractor designed the survey, investigated historical records, canvassed local authorities regarding lynx activity, and scouted for potential lynx habitat and survey corridors in preparation for the track survey. During the winter of 2007, the winter lynx track survey was conducted on approximately 541 miles of transect within the 252 square mile survey area and on an additional 73 miles of transects in townships adjacent to the survey area (ENSR 2007). See ENSR (2007) for additional details regarding survey methods. The survey detected no Canada lynx tracks, but intercepted 56 bobcat (*Lynx rufus*) tracks.

The failure to detect any lynx tracks with a survey as intensive as that conducted by ENSR (2007) strongly indicates that lynx were not present in the survey area. In Maine, surveyors detected 100% of radio-collared lynx present in townships when at least 0.9 mile of transect were surveyed per square mile; at least one lynx was detected in townships that were known to be occupied by lynx when 0.6 mile of transect was surveyed per square mile (Vashon et al. 2003). ENSR (2007) surveyed 2.1 miles of transect per square mile and should have detected lynx if they were present. The prevalence of bobcat track intercepts in the survey area reflects the general predominance of this species in the vicinity of the proposed project (Fig. 3). Bobcats may compete with lynx where they overlap and this competition may result in segregation of the species geographically and at the scale of individual home ranges (Robinson 2006).

In the BA, the Corps stated that 3835 acres within the action area “could provide habitat for lynx and snowshoe hares.” In its analysis of habitat suitability for lynx, however, ENSR (2007:5-4) found that only a portion of those acres are either currently or potentially suitable for lynx. In its BA, the Corps seems to be describing those areas where lynx may generally occur (e.g., travel areas), whereas ENSR (2007) is more precisely describing areas that contain or that may develop habitat features essential to lynx survival and reproduction (e.g., areas with relatively high hare densities, ENSR 2007:3-5). Although lynx may travel through some habitats that provide little value for feeding or reproduction, they “occur predominantly in habitats where snowshoe hares are abundant, especially early successional stands with high stem densities” (Aubry et al. 2000:374). It appears that ENSR (2007) is referring to these habitat conditions when they describe which portions of the survey area are suitable for lynx and which are not.

Only one part of the action area – the northeastern quarter of Township 56 North, Range 23 West – may currently contain some habitat suitable for lynx and some recently logged areas that may become suitable for lynx as a result of forest regeneration “within the next 10 years” (ENSR 2007:5-4). Portions of the action area (parts of Stockpile Area B, the Mine Area, and part of the Plant Area) contain approximately 1200 acres of terrestrial habitat in this township. If we assume that all of these 1200 acres are or may become suitable for lynx as a result of forest regeneration, the mining activities may destroy and/or preclude the development of suitable habitat that would approximate about one-quarter of a typical female home range in Minnesota (Moen et al. 2006, see above). The portions of townships adjoining this area are not among those identified by ENSR (2007) as having suitable habitat for lynx in the survey area.

Although lynx are unlikely to be resident species in the action area or nearby, individuals may move into the action area while making the types of long-range movements described above. In these cases, the project impacts may reduce the ability of these lynx to move through the action area and may increase movements parallel to the SE-NW orientation of the Mesabi Iron Range in the vicinity of the action area. This type of effect on lynx movement is a potential outcome of the proposed action. It is unlikely, however, that this would result in any detectable adverse impacts on the survival or reproduction of any Canada lynx due primarily to the evidently marginal importance of the action area for lynx and the presence of at least one area identified as a “wildlife travel corridor” by Emmons and Olivie Resources, Inc. (2006) that will not be affected by this action and which is actually closer to the only verified records of lynx in the survey area.

Collision with vehicles is also recognized as a documented cause of lynx mortality in Minnesota. Vehicle traffic to and from the project site would include the following:

- Road access to the project site
- Rail access to the project site
- Road traffic within the project site
- Haul roads from the pit to the ore crusher

In previous actions, the Service has anticipated incidental take of lynx as a result of increased vehicular traffic in close proximity to areas containing or likely to contain lynx home ranges. Increased vehicular traffic would result from a new road access that would be constructed from Trunk Highway 69 west to the City of Marble and on County Road 58 from State Highway 65 to the mine. This increased traffic will occur in areas where lynx are not likely resident and away from areas identified as suitable or potentially suitable for lynx (ENSR 2007). Therefore, the likelihood of the proposed action resulting in the death or injury of any Canada lynx due to a vehicle collision is discountable.

A review of the scientific literature found no references to the impact of air quality on Canada lynx. Since the existing regulatory program for air quality sets standards for human health and safety, we will assume that the project-related air quality impacts will not adversely affect Canada lynx.

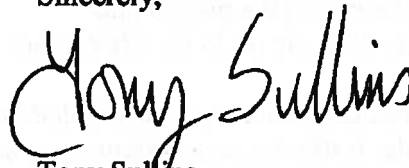
In conclusion, the action area is located near the edge of lynx range, does not contain extensive areas of suitable lynx habitat, and a comprehensive survey using established methods (e.g., see Squires et al. 2004) and qualified observers failed to record a single lynx in and around the action area in 2007 and during a preliminary investigation in 2006. Increased vehicular traffic will not occur near any area where lynx have been recently verified or near any areas identified as suitable or potentially suitable for lynx (ENSR 2007). Although project activities may affect lynx potentially moving through the action area due to the destruction of forested habitat, it is unlikely that these effects to movement will result in reduced survival or reproduction of any lynx. In summary, although the proposed action is likely to result in some effects to lynx, the Service finds that those effects are likely to be insignificant or discountable and, thus, are not likely to adversely affect any Canada lynx. Insignificant effects relate to the size of the impact

and should never reach the scale where take¹ occurs. Discountable effects are those extremely unlikely to occur. Based on best judgment, a person would not: (1) be able to meaningfully measure, detect, or evaluate insignificant effects; or (2) expect discountable effects to occur. Therefore, we concur with the Corps' determination that the proposed action may affect, but is not likely to adversely affect Canada lynx.

This precludes further action as required under section 7 of the Endangered Species Act of 1973, as amended. If new information becomes available that indicates federally-listed species may be affected in a manner or to an extent not previously considered, such as if evidence of lynx activity increases significantly in the action area, consultation must be re-initiated.

If you have any questions or if we can be of further assistance please contact me directly at (612)725-3548, extension 201, or on my cell phone at (612)296-2238.

Sincerely,

A handwritten signature in black ink that reads "Tony Sullins". The signature is written in a cursive, flowing style.

Tony Sullins
Field Supervisor

CC: Scott Ek, MN DNR – St Paul

¹ Under the Endangered Species Act, "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.

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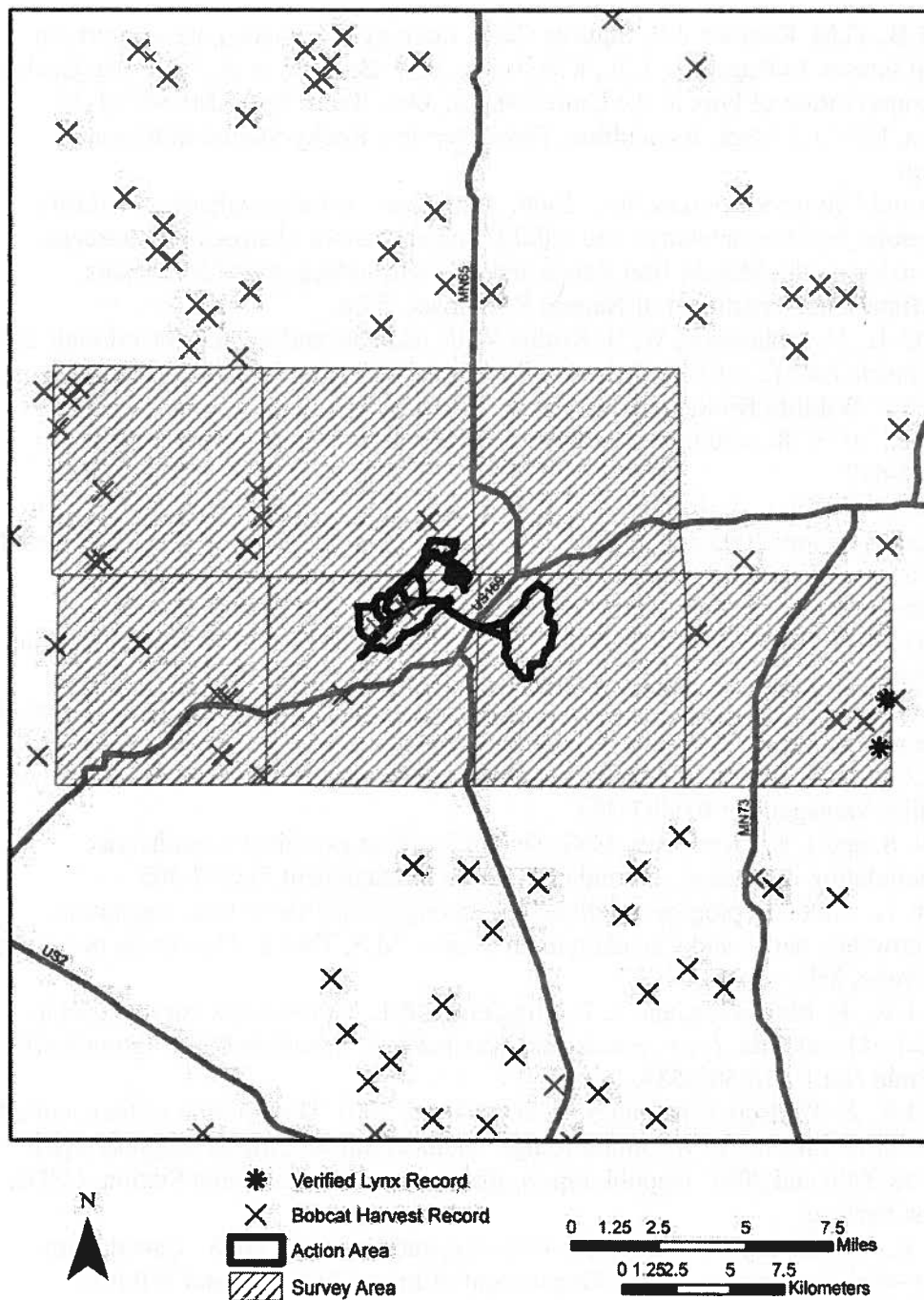


Figure 1. Location of the proposed action area and the larger lynx survey area (ENSR 2007) comprised of seven townships (252 square miles). Two verified lynx records occur in the easternmost extent of the survey area.

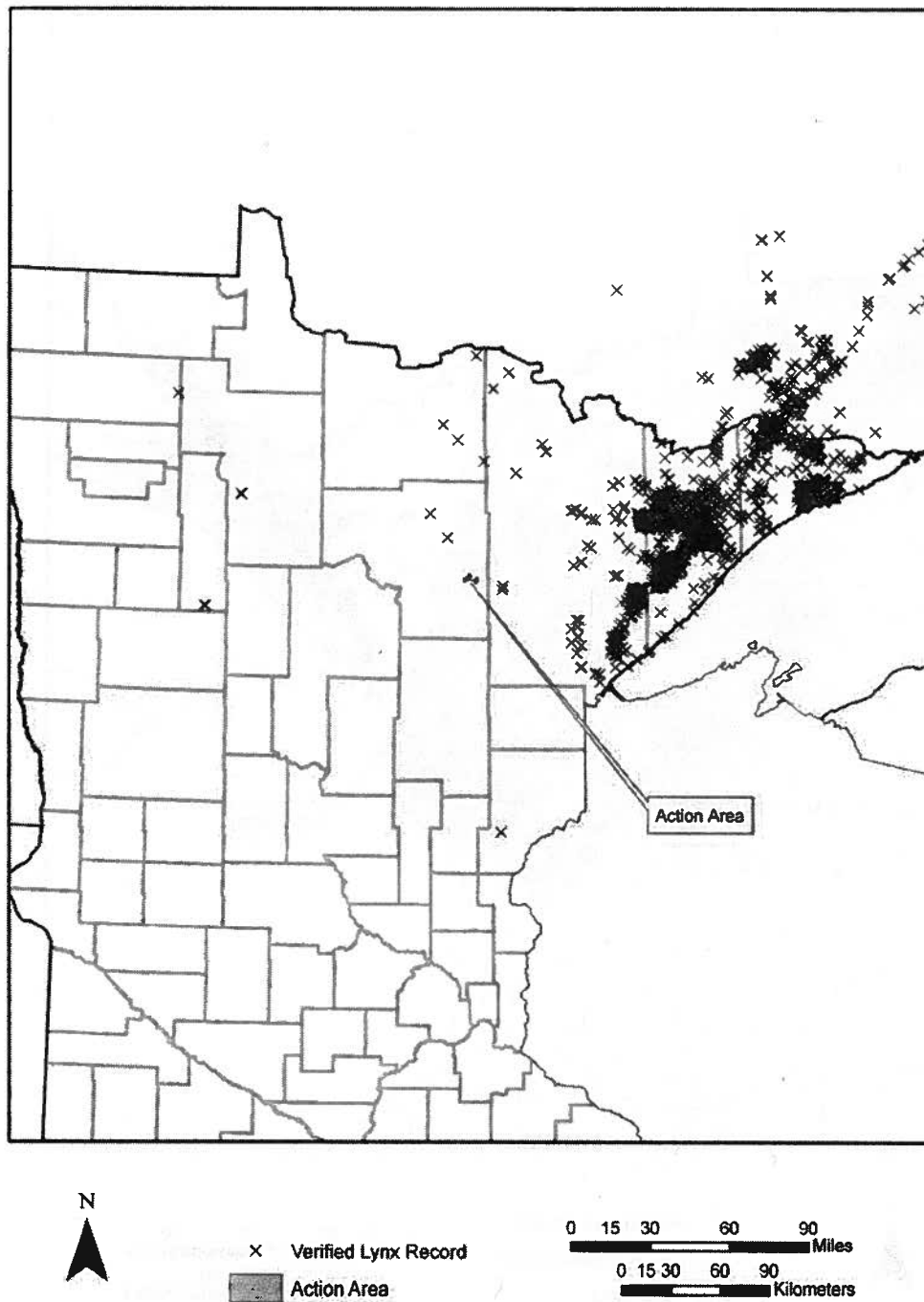


Figure 2. Distribution of lynx records verified in Minnesota since approximately 2000, the year the species was listed as threatened in the lower 48 states.

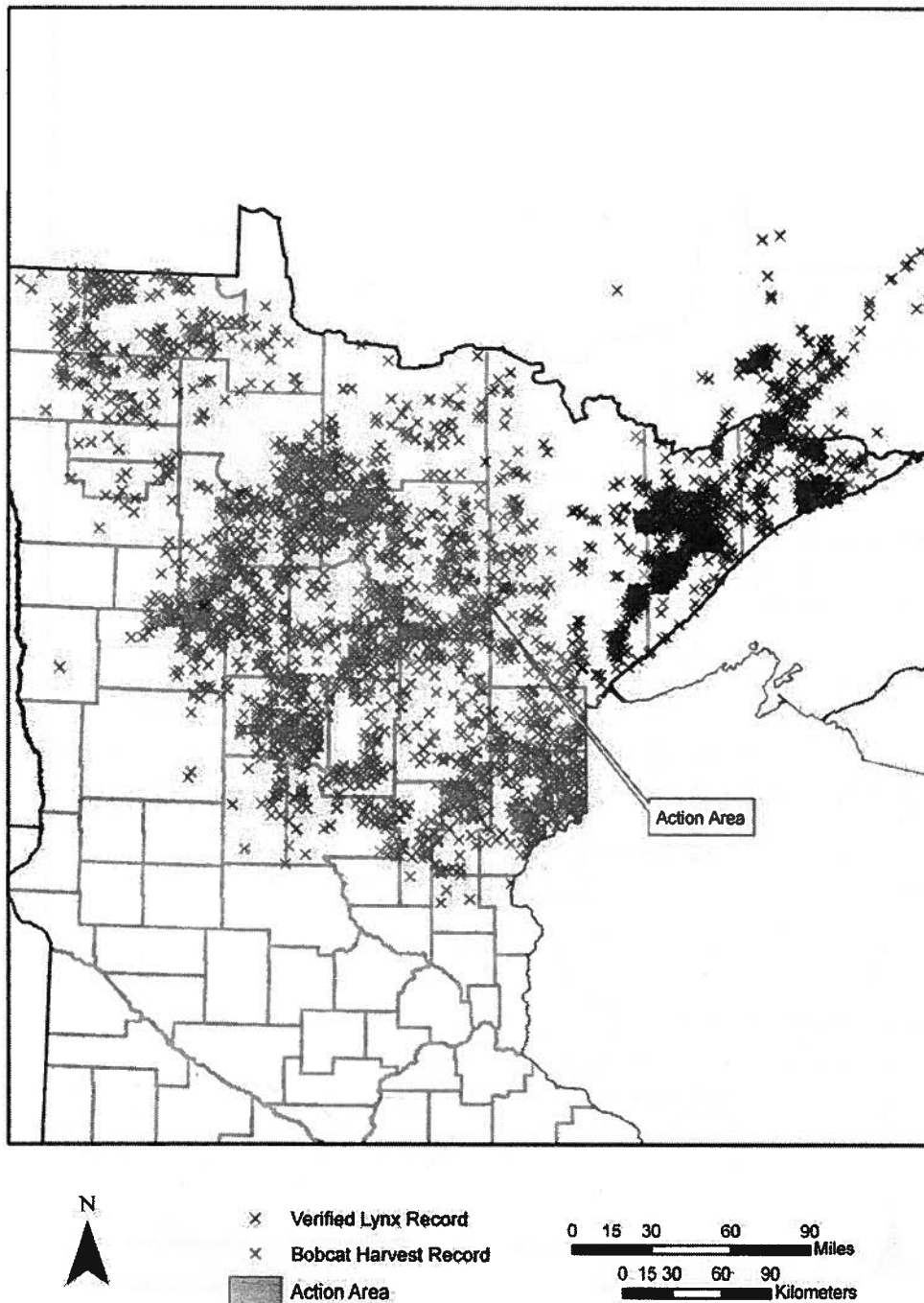


Figure 3. Relative distribution of bobcat harvest locations and verified lynx records in Minnesota. Bobcat records are shown for the period 2001-2006, whereas lynx records are from approximately 2000-present.